

REMARKS-General

1. The newly drafted independent claims 33 and 50 incorporate all structural limitations of the original claim 1 and include further limitations previously brought forth in the disclosure. No new matter has been included. All new claims 33-64 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 USC 112.

Regarding to Rejection of Claims under 35USC102

2. The Examiner rejected claims 1-3, 6 and 8-17 as being anticipated by Acker (US. 5,581,850), claims 1-8, 11 and 13 as being anticipated by Chisholm (US. 5,189,761), claims 1 and 29-31 as being anticipated by Severson (US. 6,523,229).

3. Pursuant to 35 U.S.C. 102, "a person shall be entitled to a patent unless:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

4. In view of 35 U.S.C. 102(b), it is apparent that a person shall not be entitled to a patent when his or her invention was patent in this country more than one year prior to the date of the application for patent in the United States.

5. However, all the Acker, Chisholm and Severson patents and the instant invention are not the same invention according to the fact that the independent claims of the Acker, Chisholm and Severson patents do not read upon the instant invention and the independent claims 33 and 50 of the instant invention does not read upon the Acker, Chisholm and Severson patents too. Apparently, the instant invention, which discloses an adjustable and detachable binding device, should not be the same invention as the Acker, Chisholm and Severson patents which disclose a fastening device.

6. Acker, Chisholm and Severson fail to anticipate the distinctive features of:

(i) an elongated locker slot, having a triangular shape, being integrally and longitudinally formed along the head portion of the binding member to detachably engage with one of the locking teeth to selectively form a binding loop of the binding

member for fittingly binding up the object, wherein the locker slot has a longitudinal length substantially larger than the width of the binding member and a transverse width which is larger than a thickness of the binding member and is larger than a width of the holding neck portion of each of the locking teeth (as claimed in claim 33);

(ii) the binding member being bent to selectively form a diameter of the binding loop that the tail portion of the binding member is twisted to align to the longitudinal length of the locker slot, such that the tail portion of the binding member is slidably passed through the locker slot while the tail portion of the binding member is then twisted back to overlapped on the head portion to lock up the holding neck portion of the locking tooth at the locker slot at the transverse width thereof, so as to form the binding loop of the binding member, therefore, the locking teeth are detachably engaged with the locker slot to retain the diameter of the binding loop with respect to the object, while the locking teeth are allowed to be detached from the locker slot when the tail portion of the binding member is twisted to align to the longitudinal length of the locker slot (as claimed in claims 33 and 50);

(iii) the locker slot having a width gradually increasing towards the head end of the binding member, wherein the longitudinal length of the locker slot is defined along an adjacent edge thereof for the tail portion of the binding member to slidably inserting therethrough (as claimed in claim 34);

(iv) the locker slot further having a longitudinal guiding width defining at a height of the locker slot, wherein the guiding width of the locker slot at least equals to the width of the binding member (as claimed in claim 35); and

(v) a plurality of cuts being spacedly and inclinedly formed along two longitudinal edges of the tail portion of the binding member respectively to form a plurality of locking teeth and to define a holding neck portion on the binding member at a root portion of each of the locking teeth, wherein a width of the holding neck portion of each of the locking teeth is smaller than a width of the binding member, wherein each of the locking teeth has a guiding edge having an outer end formed at the longitudinal edge of the tail portion of the binding member and an inner end inclinedly and inwardly extended on the binding member towards the tail end thereof to define the holding neck

portion on the binding member at the inner end of the guiding edge of each of the locking teeth (as claimed in claim 50).

7. Accordingly, Acker merely anticipates a fastening strap 10 having a first end and a second end, wherein a plurality of tapered notches 16 formed at a tongue portion 15 of the first end of the fastening strap 10 and aligned slots 18, 19 formed on the second end of the fastening strap 10. Acker merely suggests (in column 2, lines 13-14) the notches 16 each have an angularly disposed shoulder 17 that extends away from the tongue portion without any mention of any cut formed longitudinal edges of the tail portion of the binding member respectively to form a plurality of locking teeth as in claim 50 of the instant invention. In addition, Acker merely teaches and anticipates the **rectangular** elongated slots 18, 19 (in column 2, lines 15-18) extended in longitudinal alignment inwardly from the end 14 and arc of a size to allow passage registration of the tapered tongue portion 15 therethrough. The only mention in Acker is the slot 18, 19 has a rectangular in the specification and the drawings without any further disclosure of any shape of the slot. In other words, Acker fails to anticipate the locker slot having a triangular shape has a **longitudinal length** substantially larger than the width of the binding member and a **transverse width** which is larger than a thickness of the binding member and is larger than a width of the holding neck portion of each of the locking teeth as in claim 33 of the instant invention.

8. Chisholm merely discloses a strap 10 having a plurality of spaced apart shoulders 18, 19 at the first end 16 of the strap 10 and an opening 30 at the second end 26 of the strap 10. In other words, Chisholm fails to anticipate a plurality of cuts being formed longitudinal edges of the tail portion of the binding member respectively to form a plurality of locking teeth as in claim 50 of the instant invention. In addition, Chisholm merely teaches, in column 2, lines 65-68, the opening 30 has a length 46 that is generally greater than the maximum strap width 42 and a maximum width 48 which is slightly larger than the neck portion. It is apparent that Chisholm fails to teach and anticipate the same recitation and limitation in the claim 33 that the locker slot having a triangular shape has a **longitudinal length** substantially larger than the width of the binding member and a **transverse width** which is larger than a thickness of the binding member and is larger than a width of the holding neck portion of each of the locking teeth. Regarding to claims 34 and 35 of the instant invention, the longitudinal length of the locker slot is defined along an adjacent edge thereof for the tail portion of the

binding member to slidably inserting therethrough and a longitudinal **guiding width** **defining at a height of the locker slot**, wherein **the guiding width of the locker slot at least equals to the width of the binding member**.

9. Severson, on the other hand, discloses a cord keeper strap having a cross shaped hole proximate the first end of the strap, a round hole adjacent to the cross shaped hole, and a predetermined number of slotted holes formed in the strap. Severson never mentions any concept of any cut formed longitudinal edges of the tail portion of the binding member respectively to form a plurality of locking teeth as in claim 50 of the instant invention. Furthermore, Severson fails to anticipate the locker slot having a triangular shape has a **longitudinal length** substantially larger than the width of the binding member and a **transverse width** which is larger than a thickness of the binding member and is larger than a width of the holding neck portion of each of the locking teeth as in claim 33 of the instant invention.

10. Regarding to claims 33 to 49 of the instant invention, the adjustable and detachable binding device comprises a binding member having a triangular locker slot, wherein the locker slot has a **longitudinal length** **(an adjacent edge of the triangular slot)** substantially larger than the width of the binding member and a **transverse width** **(a height of the triangular slot)** which is larger than a thickness of the binding member and is larger than a width of the holding neck portion of each of the locking teeth. Therefore, the tail portion of the binding member must be intentionally twisted to **align to the longitudinal length** of the locker slot in order to slide into the locker slot.

11. It is worth to mention that the transverse width of the locker slot is shorter than the longitudinal length of the locker slot such that the transverse width of the locker slot is shorter than the width of the binding member. Unlike the strap of Chisholm, the opening 30 (the locker slot of the instant invention) has the length 46 (the transverse width of the instant invention) greater than the maximum strap width 42 (the width of the binding member of the instant invention). Therefore, the shoulders 18 of the Chisholm's strap 10 may accidentally slide out of the opening 30 when the strap 10 is bent between two adjacent edges of the opening 30. In other words, the configuration of the locker slot ensures the engagement between the locking teeth and the locker slot to securely retain the binding loop of the binding member.

12. Regarding to claims 50 to 64 of the instant invention, the adjustable and detachable binding device comprises a binding member having a plurality of cuts being spacedly and inclinedly formed along two longitudinal edges of the tail portion of the binding member respectively to form a plurality of locking teeth and to define a holding neck portion on the binding member at a root portion of each of the locking teeth. Both Acker and Chisholm teach the notches are spacedly formed on the strap wherein a shoulder distance is formed between each two shoulders. It is worth to mention that the relatively large shoulder distance will cause an unwanted sliding movement of the end portion of the strap, which may loosen the loop of the strap or even disengage the shoulders from the opening. The instant invention provides the cuts at the longitudinal edges of the tail portion of the binding member to minimize the shoulder distance between each two locking teeth. Therefore, when the locking teeth are engaged with the locker slot, the guiding edges 211B of the cuts are pressed on a top side of the binding member while the neck portion 22B is pressed on the bottom side of the binding member to sandwich the binding member between the locking teeth so as to securely lock up the head portion of the binding member with the tail portion thereof to form the binding loop.

13. The applicant respectfully submits that all Acker, Chisholm and Severson fail neither suggest nor anticipate the above distinctive features (i) to (v) as claimed in the claims 33-64 of the instant invention.

Response to Rejection of Claims under 35USC103

14. The Examiner rejected claims 1, 2, 18-20 and 23 over Acker in view of Moran et al., claims 1, 2, 6, 22 and 24 over Chisholm in view of Moran et al., claims 1, 2 and 26-28 over Acker in view of Steinborn and Chisholm, and claims 1 and 32 over Severson in view of Massey. Pursuant to 35 U.S.C. 103:

“(a) A patent may not be obtained though the invention is **not identically** disclosed or described as set forth in **section 102 of this title**, if the **differences** between the subject matter sought to be patented and the prior art are such that the **subject matter as a whole would have been obvious** at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.”

15. In view of 35 U.S.C. 103(a), it is apparent that to be qualified as a prior art under 35USC103(a), the prior art must be cited under 35USC102(a)~(g) but the disclosure of the prior art and the invention are not identical and there are one or more differences between the subject matter sought to be patented and the prior art. In addition, such differences between the subject matter sought to be patented **as a whole** and the prior art are obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

16. In other words, the differences between the subject matter sought to be patent as a whole of the instant invention and Acker, Chisholm and Severson which are qualified as prior art of the instant invention under 35USC102(b) are obvious in view of Moran, Steinborn and Massey at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

17. However, as recited above, Acker merely anticipates a fastening strap 10 having a first end and a second end, wherein a plurality of tapered notches 16 formed at a tongue portion 15 of the first end of the fastening strap 10 and aligned slots 18, 19 formed on the second end of the fastening strap 10. Chisholm merely discloses a strap 10 having a plurality of spaced apart shoulders 18, 19 at the first end 16 of the strap 10 and an opening 30 at the second end 26 of the strap 10. Severson discloses a cord keeper strap having a cross shaped hole proximate the first end of the strap, a round hole adjacent to the cross shaped hole, and a predetermined number of slotted holes formed in the strap. On the other hand, Moran et al, merely teaches a strap provided with a plurality of opposingly disposed slits 13 wherein the slit 13 of Moran is a totally different idea with the CUT of the binding member of the instant invention which minimizes a gap between each two locking teeth.

18. Therefore, the differences between Acker, Chisholm, Severson and the instant invention as claimed in claims 33 to 64 are not limited to the disclosure of "the strap with notches and openings", but includes the above distinctive features (i) to (v). In addition, regarding to claims 33 to 64, the instant invention further contains the following distinctive features:

(vi) each of the locking teeth having a guiding edge having an outer end formed at the longitudinal edge of the tail portion of the binding member and an inner end inclinedly and inwardly extended on the binding member towards the tail end

thereof to define the holding neck portion on the binding member at the inner end of the guiding edge of each of the locking teeth;

(vii) each of the locking teeth having a locking edge transversely and inwardly extended from the outer end of the guiding edge to the inner end of the adjacent guiding edge such that the locking teeth are continuously extended along the longitudinal edge of the tail portion of the binding member;

(viii) the guiding edge of each of the locking teeth being extended inclinedly at a direction corresponding to an inserting direction of the tail portion of the binding member such that the locking teeth are allowed to slide through the locker slot at the inserting direction while the locking teeth are blocked up at the transverse width at an ejecting direction which is opposed to the inserting direction;

(ix) each of the locking teeth embodying an elongated slit inclinedly formed on the tail portion of the binding member at the longitudinal edge thereof;

(x) the locking teeth, having even thickness, being parallelly extending to the longitudinal edge of the tail portion of the binding member to form as a comb shape so as to define the holding neck portion on the binding member at a root portion of each of the locking teeth;

(xi) the tail end of the binding member having a tapered shape having a width substantially smaller than the transverse width of the locker slot such that the tapered tail portion of the binding member is guided to slide through the locker slot when the tail end of the binding member is inserted therethrough;

(xii) the locker slot, having a rectangular shape, having an even width longitudinally extended along the head portion of the binding member, wherein the longitudinal length of the locker slot is defined at a longitudinal edge thereof and the transverse width of the locker slot is defined at a transverse edge thereof; and

(xiii) the locker slot having a longitudinal engaging portion having a width larger than the thickness of the binding member and a longitudinal locking portion the integrally extended from the engaging portion towards the head end of the binding member, wherein the locking portion has a width gradually increasing from the engaging portion in such a manner that when the respective locking tooth the is locked at the

locker slot the after the tail portion of the binding member is guided to slide through the locker slot via the engaging portion thereof, the holding neck portion of the respective locking tooth is retained at the locking portion of the locker slot.

19. The applicant respectfully submits that the invention must be considered as a whole and there must be something in the reference that suggests the combination or the modification. *See Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984) ("The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination"), *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984), ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.") *In re Laskowski*, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), ("Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, "[t]he mere fact that the prior art could be modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.")

20. In the present case, there is no such suggestion. Acker, Chisholm, Severson and Moran et al., Steinborn and Massey perform very different types of binding device. In any case, even combining Acker, Chisholm, Severson and Moran et al., Steinborn and Massey would not provide the invention as claimed -- a clear indicia of nonobviousness. *Ex parte Schwartz*, slip op. p.5 (BPA&I Appeal No. 92-2629 October 28, 1992), ("Even if we were to agree with the examiner that it would have been obvious to combine the reference teachings in the manner proposed, the resulting package still would not comprise zipper closure material that terminates short of the end of the one edge of the product containing area, as now claimed."). That is, modifying Acker, Chisholm and Severson with Moran et al., Steinborn and Massey, as proposed by the Examiner, would not provide an adjustable and detachable binding device having the above distinctive features (i) to (xiii).

21. Applicant believes that neither Acker, Chisholm, Severson and Moran et al. Steinborn nor Massey, separately or in combination, suggest or make any mention of the above distinctive features (i) to (xiii) as claimed in the instant invention

22. Applicant believes that for all of the foregoing reasons, all of the claims are in condition for allowance and such action is respectfully requested.

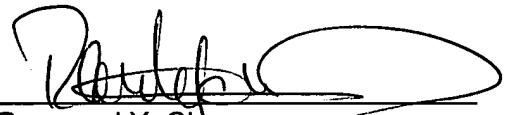
The Cited but Non-Applied References

23. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

24. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the objection are requested. Allowance of claims 33-64 at an early date is solicited.

25. Should the Examiner believe that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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